



# University of Pittsburgh

Department of Environmental Health & Safety

## Sample Phrases for Completion of Agent Workbook

### Section 4: Sample Biological Agent (BA) Information

<b>Bio Agent ID:</b>	Adenovirus	<b>Biosafety Level</b>	BSL-2
<b>Risk Mitigation</b>	<b>QUESTION:</b> Describe plans to mitigate risks for this agent; including required personal protective equipment, training programs, and hazard warnings.		
	<b>ANSWER:</b> Staff wear lab coats and gloves when working in the lab. Goggles are available if desired. All staff have been through DLAR small animal training and EH&S bloodborne pathogen training. Workers do not begin to handle agents until they have been satisfactorily trained by other staff or the PI. The lab is signed as BSL-2.		
<b>Storage/Transport</b>	<b>QUESTION:</b> For BSL-2 agents or higher, describe methods of transport (i.e. between storage and use locations).		
	<b>ANSWER:</b> Virus is transported to the animal facility in screw-cap tubes on ice. A cooler labeled with a biohazard sticker is used to transport the virus.		
	<b>QUESTION:</b> For BSL-2 agents or higher (administered to animals), describe animal housing and transport practices.		
	<b>ANSWER:</b> Mice are housed in a BSL-2 room in the animal facility. Filter-top cages are used for housing. Animals are transported to the lab in B-70 in their own cages.		
<b>Decontamination and Disposal</b>	<b>QUESTION:</b> How will solid bio waste (contaminated tubes, culture flasks, pipettes) be decontaminated before disposal?		
	<b>ANSWER:</b> All plastic ware is bleached and then disposed in biohazard bags. Animal waste is collected and frozen, then returned to the DLAR.		
	<b>QUESTION:</b> How will liquid biological waste be decontaminated before disposal?		
	<b>ANSWER:</b> All liquid waste is aspirated into a flask containing bleach. The flask always contains at least 10% bleach. At the end of the day, all waste is poured down the sink drain.		
<b>Spill Procedures</b>	<b>QUESTION:</b> How will spills of this biological agent be handled?		
	<b>ANSWER:</b> Spray 10% bleach onto spill and let stand for 15 minutes. If surface is still wet after 15 minutes, clean up with paper towel and dispose in biohazard bag. Quantities of liquid spilled should not ever exceed 1ml. Any equipment that was sprayed or exposed to virus is also bleached.		

### Section 5: Sample Chemical Agent (CA) or Hazardous Chemical (HC) Information

<b>Chem Agent ID:</b>	Isoflurane (Forane)	<b>CAS #</b>	26675-46-7
<b>Risk Mitigation</b>	<b>QUESTION:</b> Describe methods of measuring and limiting exposure of personnel to anesthetic gases (e.g. any monitoring or scavenging systems and associated procedures).		
	<b>ANSWER:</b> A state-of-the-art gas delivery and scavenging system was recently installed in the lab and validated by the supplier. A schedule of maintenance is in place.		
<b>Chem Agent ID:</b>	Bromodeoxyuridine (BrdU)	<b>CAS #</b>	59-14-3
<b>Risk Mitigation</b>	<b>QUESTION:</b> Describe plans to mitigate risks for this agent, including: hazard training / warnings, required personal protective equipment (PPE), agent decontamination and spill cleanup, animal housing and transport, animal cage decontamination and bedding disposal.		
	<b>ANSWER:</b> All processes involving agent will be performed in a certified chemical fume hood. All animals exposed to agent will be housed in microisolator cages with labels listing the name of the agent. Gloves should be worn at all times; double gloving (nitrile over latex) is recommended. Other personal protective equipment (PPE), including lab coat and eye protection should also be utilized. All used cages/bedding should be cleaned/disposed in a controlled manner (dump station). All used bedding should be incinerated. Entry doors to facilities housing animals exposed to agent must be labeled with the name and also state "Suspect Carcinogen, Mutagen, and Reproduction Hazard."		

<b>Haz Chem ID:</b>	Osmium Tetroxide	<b>CAS #</b>	20816-12-0
<b>Risk Mitigation</b>	<b>QUESTION:</b> Describe plans to mitigate risks for this chemical, including: hazard training / warnings, required personal protective equipment (PPE), agent decontamination and spill cleanup.		
	<b>ANSWER:</b> All usage of this agent occurs in a certified chemical fume hood; absolutely no handling of the material is done on the open lab bench. Gloves are worn at all times (double gloving with nitrile over latex). Other personal protective equipment (PPE), including lab coat and eye protection is also utilized.		
<b>Haz Chem ID:</b>	Formalin / Formaldehyde / Paraformaldehyde	<b>CAS #</b>	50-00-0, formaldehyde; 9002-81-7, paraformaldehyde
<b>Risk Mitigation</b>	<b>QUESTION:</b> Describe plans to mitigate risks for this chemical, including: hazard training / warnings, required personal protective equipment (PPE), agent decontamination and spill cleanup.		
	<b>ANSWER:</b> Staff have been through EH&S chemical hygiene training. Staff wear lab coats and gloves, and wear safety glasses when handling hazardous chemicals. A chemical fume hood is used to handle most hazardous chemicals. Any spills are cleaned up with Spill-X formalin reagent.		